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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,177	11/25/2003	Charles J. Masenas	BUR920030144US1	1176
30449	7590	01/04/2005	EXAMINER	
SCHMEISER, OLSEN + WATTS			NGUYEN, HAI L	
3 LEAR JET LANE				
SUITE 201			ART UNIT	
LATHAM, NY 12110			2816	
			PAPER NUMBER	

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/707,177	Applicant(s) MASENAS, CHARLES J.	
	Examiner Hai L. Nguyen	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application..
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 10, 11, 15 and 20 is/are rejected.
- 7) ☒ Claim(s) 2-4, 6-9, 12-14, 16-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 7 and 14 are objected to because of the following informalities:

Claim 7, line 2, "s" should be changed to --is --; and

Claim 14, line 1, "11" should be changed to --11 --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5, 10, 11, 15, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Zhang et al. (US 6,778,022).

With regard to claims 1 and 11, Zhang et al. discloses in Figs. 2A-6 a voltage controlled oscillator circuit, and a method of use thereof, comprising a drive circuit (20, 2200); an inductor/capacitor (LC) tank circuit, the LC tank circuit and the drive circuit collectively comprising a first oscillating node (270) and a second oscillating node (280), the first adapted to have a first voltage, oscillating node being the second oscillating node being adapted to have a second voltage; and a diode (262, 264) adapted to control an amplitude of the first voltage and an amplitude of the second voltage.

Art Unit: 2816

With regard to claims 5 and 15, the reference also meets the recited limitations in these claim.

With regard to claims 10 and 20, the voltage controlled oscillator circuit further comprises a comparator (660) adapted to compare the first voltage to the second voltage, wherein the voltage controlled oscillator circuit is within a phase-locked loop circuit (600), and wherein the comparator is further adapted to provide an output signal that tracks a phase and frequency of a reference signal for the phase-locked loop circuit.

Allowable Subject Matter

4. Claims 2-4, 6-9, 12-14, and 16-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose or fairly suggest a voltage controlled oscillator circuit (11A in instant Fig. 3), and a method of use thereof, as recited in claims 2 and 12, having specific structural limitations such as a diode (44) adapted to control an amplitude of the first voltage (27) and an amplitude of the second voltage (29), wherein the diode comprises a field effect transistor (FET) with a gate electrically shorted to a drain; and being configured in combination with the rest of the limitations of the base claims and any intervening claims.

The prior art of record fails to disclose or fairly suggest a voltage controlled oscillator circuit (11A in instant Fig. 3), and a method of use thereof, as recited in claims 4 and 14, having specific structural limitations such as a diode (44) adapted to maintain an amplitude of the first voltage (27) that is about constant over time and an amplitude of the second voltage (29) that is

Art Unit: 2816

about constant over time; and being configured in combination with the rest of the limitations of the base claims and any intervening claims.

The prior art of record fails to disclose or fairly suggest a voltage controlled oscillator circuit (11A in instant Fig. 3), and a method of use thereof, as recited in claims 6 and 16, having specific structural limitations such as a diode (44) adapted to limit the amplitude of the first voltage (27) to within a range between a supply voltage (41) of the voltage controlled oscillator circuit and a ground voltage, and wherein the diode is adapted to limit the amplitude of the second voltage (29) to within a range between the supply voltage of the voltage controlled oscillator circuit and the ground voltage.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. For example, Albon et al. (US Pat. 6,683,509) is cited as of interest because it discloses a voltage-controlled oscillators.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 571-272-1747 and Right Fax number is 571-273-1747. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The official fax phone number for the organization where this application or proceeding is 703-872-9306.

Art Unit: 2816

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1562.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HLN 
December 15, 2004


TIMOTHY P. CALLAHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800